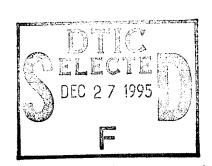


Omaha District

Results of an Intensive Cultural Resource Inventory in the Boyer Bend Area, Brule County, South Dakota

September 1995



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Mill Creek Paleoindian Plains Village Pleistocene moraine

Post-Contact Coalescent River Basin Survey project South Dakota Valley phase Woodland

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Results of an Intensive Cultural Resource Inventory in the Boyer Bend Area, Brule County, South Dakota

Thomas K. Larson

September, 1995

Abstract

An intensive cultural resource inventory of approximately 1132 acres of Corps of Engineers' land in the Boyer Bend Area, Lake Francis Case, revealed two previously unrecorded archaeological sites. Site 39BR48 is a small scatter of lithics. Site 39BR49 is the remains of the L. Somers homestead. Neither of these sites is believed to be eligible for nomination to the National Register of Historic Places. Except for the marker post described by Nowak (1980), no additional information could be gathered on Brule City. The previously noted house depressions are currently covered by a dense concentration of driftwood.

INTRODUCTION

The purpose of this report is to discuss the findings of an cultural resource survey carried out on approximately 1132 acres in Brule County, South Dakota. The area inspected of Corps of Engineers administered land in the Boyer Bend Area on the left bank of Lake Francis Case. The work was carried out by personnel for LTA, Inc. under Purchase Order No. DACW45-95-P-1088 issued by the US Army Corps of Engineers, Omaha District. The work to be accomplished is defined in the Scope of Work as follows:

The work to be accomplished by the Contractor shall consist of an archaeological survey of U.S. Army Corps of Engineers lands on the east bank of Lake Francis Case in the area of Boyer Bend. The project involves surveying approximately 1132 acres of grassland . . . The ground cover will be moderate to dense.

The objectives and purpose of the archaeological investigation are to locate and record prehistoric and historic archaeological sites. The objective is also to determine whether archaeological sites, eligible for listing on the National Register of Historic Places (NRHP), exist in the survey area [Corps of Engineers 1995].

Field work for this project was initiated on August 10 and was completed on August 13, 1995. Crew members were Thomas K. Larson (principal investigator), Ross Hilman, Cynthia Oliver, Sarah Rothwell, and John Sharpe.

Appendix A to this report contains the ARIES forms for the two sites recorded during the project. Appendix B is a detailed map showing the area inspected and the location of the cultural resource sites recorded.

ENVIRONMENTAL SETTING AND REGIONAL CULTURAL HISTORY

The project area is on the left bank of the Missouri River, to the south of Chamberlain and to the northwest of the Bijou Hills. As shown in Appendix B, the area inspected starts on the west side of a small inlet in the SE 1/4 of Section 5, T. 102 N., R. 71 W. and ends on the southwest side of another small inlet in the SE 1/4 of Section 24, T. 103 N., R. 72 W.

The left bank of Lake Francis Case is considered to be the border between the Central Lowland and Great Plains physiographic provinces (Fenneman 1931). The area inspected (Figure 1; Figure 2) takes in much of the interior banks of a large meander of the river that diverts the channel first to the southwest and then back to the east. Sediment in the project area consists of Pleistocene moraine that mantles Cretaceous Pierre Shale deposits. Steep slopes within the project area provide extensive exposures of both the glacial sediments and the shale. Soil development is generally thin and poorly developed.

Vegetation ranges from short-grass to tall-grass prairie. There are dense stands of juniper (Juniper virginiana) in the steep, northwest-facing slopes in the northern part of the project area.

Lake levels during the time of the inventory varied from 1359.0 to 1359.7 feet above mean sea level. Although ground visibility was generally good and not obscured by vegetation, heavy accumulations of driftwood completely obscured the ground surface of several low lying flats.

Within the South Dakota state plan (Winham and Hannus 1990), the portion of Lake Francis Case that includes the project area is within the Boyer Bend Study Unit. The following prehistoric/aboriginal cultural traditions have been defined for the area:

Paleoindian, ca. 11,500 to 7,000 years before present (BP) Archaic, 8,000 to 2,000 BP Woodland, 2,500 to 1,050 BP Plains Village, 1,050 BP to post-European contact

Within the Boyer Bend Study Unit, Woodland and Plains Village tradition sites have been the most extensively investigated. To date, evidence for Woodland in the vicinity of Lake Francis Case has come primarily from burial mounds. Both Valley phase and Loseke Creek phase components have been identified. The transition from Woodland to Plains Village within the study unit is not completely understood. Some authors (e.g., Lass 1981; Anderson 1975) believe that groups such as Mill Creek and Great Oasis were transitional between the two cultural traditions. Identified Plains Village sites in the study unit represent the Initial Middle Missouri, Initial Coalescent, Extended Coalescent, and Post-Contact Coalescent variants.

By the time of the Lewis and Clark expedition, there were apparently no active village sites in the Boyer Bend region. The abandoment of these lower villages was probably due to a number of factors including inter-village warfare, European diseases, and the increase in prominence of nomadic Dakota groups.

Euroamerican involvement in the study unit did not become significant until efforts were made to suppress and control Native American groups through military action and the establishment of reservations. Fort Randall was garrisoned in 1856. This was followed by the establishment of nearby Indian Agency posts at Fort Thompson and Lower Brule in the 1860s.

Euroamerican settlement of the area reached its height in the 1880s.

The study area along the east bank of the Missouri River in Charles Mix and Brule counties was settled by a mixture of Scandinavians, Germans, Dutch and Czechs. In this new land they engaged in farming and ranching with uneven results several communities were established along the . . . river. These included White Swan, Harney City, Hamilton, Brule City, Wheeler, Oacoma and Chamberlain [Olson 1979:12].

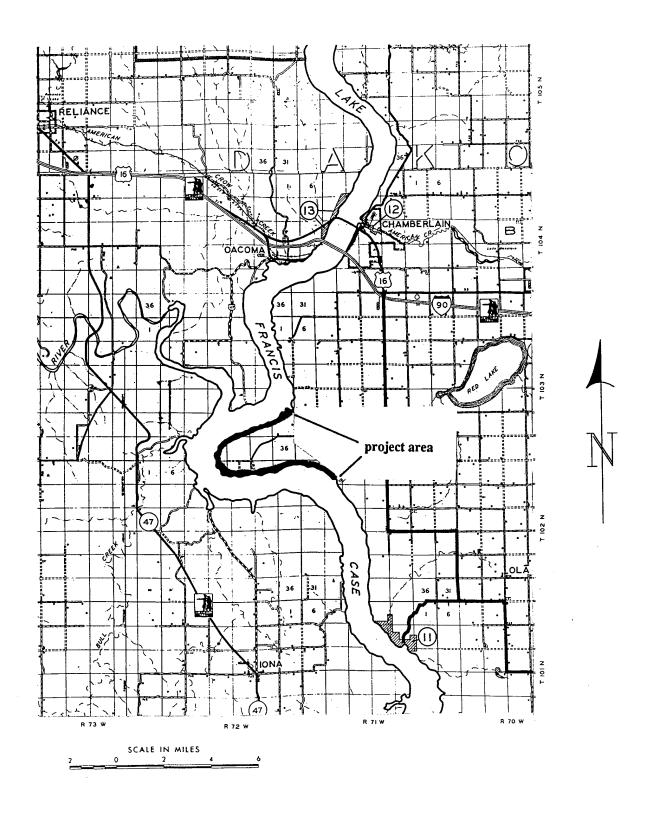


Figure 1. Map showing the area inspected. Adapted from Corps of Engineers' boating and recreation maps for Lake Francis Case.

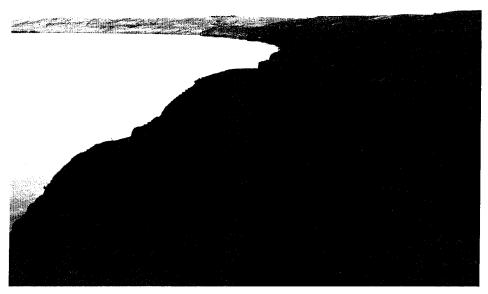


Figure 2. Photo of the northern end of the project area; view to the east.

PREVIOUS WORK

A documents search carried out at the Archaeological Research Center in Rapid City on August 11, 1995 provided information on previous studies and potential cultural resources within the project area. These data were supplemented by information on file at the Omaha District offices and overviews of previous investigations contained in Olson and Zimmerman (1979) and Tibesar et al. (1986). The following paragraphs summarize specific cultural resource investigations carried out in, or immediately adjacent to, the present study area.

Cooper (1947, 1949); Cumming (1953): The original archeological survey for Fort Randall Reservoir, carried out by River Basin Survey personnel, recorded 39BR12 and 39BR18 near the present project area. Site 39BR12 was originally described as several historic depressions and glass in the SE 1/4 of Section 5, T. 102 N., R. 71 W. Later investigations of the area (Feltman 1977; Olson and Zimmerman 1979) have produced some evidence (ceramics, lithics, bone fragments) of an aboriginal occupation at 39BR12. Based on sketch maps and other locational information, this site is just outside the present project area to the southeast.

Site 39BR18 consisted of a scatter of lithics and bison bone. It was on the second terrace of the Missouri River. This location is now completely inundated by Lake Francis Case; it is approximately one-half mile offshore from the left bank of the reservoir.

Edwards and Mattes (1948); Mattes (1949): The River Basin Survey project for Fort Randall Reservoir also included a study of potential historic sites. The site Brule City, the first Euroamerican settlement in Brule County, is described as having been in the SW 1/4 of Section 34, T. 103 N., R. 72 W. (Edwards and Mattes 1948:49). This would place it within the present project area. Archeological survey crews were not able to find anything at this location. Nowak (1980; see below) seems to have established that the actual location of Brule City, while still within the present project area, is approximately one mile down river from the location proposed by Edwards and Mattes.

Feltman (1977): Corps of Engineers' personnel conducted a cultural resource inventory for a proposed water line leading into the boat launch area in the SE 1/4 of Section 5, T. 102 N., R. 71 W (see map included as Appendix B to this report). The line parallels the modern access road into the area. The only cultural resource noted by Feltman is 39BR12, which is across a small bay and to the east of the present project area.

Olson and Zimmerman (1979): A cultural resource investigation of the east bank of Lake Francis Case was undertaken jointly by Augustana College and the University of South Dakota in 1976. All of the present project area was previously inventoried during that study. Although Olson and Zimmerman discuss artifacts found at 39BR12 (see above), no cultural resources were recorded directly within the present project area.

Olson (1979): A historical overview contained within Olson and Zimmerman (1979) describes Nobles Federal Wagon Road in the SE 1/4 of Section 24, T. 103 N., R. 72 W.

Noteworthy as the first Federal highway established in Dakota Territory, it was surveyed and marked by Colonel William Nobles of St. Paul under a government contract in 1857. Nobles and his associates secured the congressional appropriation in hopes the road would establish St. Paul as an outfitting point for westward traffic, and that ultimately it would become the route for the railroad extending all the way to the South Pass of the Rocky Mountains. Mounds were built up to mark its course, and banks were cut to give

access to river crossings, but Nobles' road building consisted of little else [Olson 1979:18].

The Olson report contains very few citations. He notes the use of "very early maps" for tracing the route of the wagon road.

Brule City is also mentioned in passing by Olson (1979:11-12) but no specific locational information is provided. Neither of these potential site locations were found by the Augustana/University of South Dakota archeological survey crews (Olson and Zimmerman 1979).

Nowak (1980): Corps of Engineers' personnel carried out a cultural resource investigation for proposed gravel quarry easements in the sections 2 and 3, T. 102 N., R. 72 W. Nowak found historic house depressions, foundations, and a concrete post apparently marking the southern limits of Brule City. In order to protect these materials, the S 1/2 of the NW 1/4 of Section 2 was withdrawn from the proposed gravel easement. A complete recording of Brule City was not undertaken and the location has never been assigned a site number. Brule City is discussed in later sections of the current report.

RESULTS OF THE INVESTIGATION

Methods

The documents search carried out is described in the preceding section. Field inspections were carried out on foot using field personnel spaced no more than 30 meters apart. All areas were inspected between the edges of Lake Francis Case and Corps of Engineers survey markers.

All cultural resources encountered were mapped and photographed. South Dakota ARIES forms were completed for each site. A semi-permanent datum marker was left at each site and their locations are indicated on the site maps (see below). No artifacts were collected.

Shovel testing was carried out at 39BR48. Shovel tests were excavated at five meter intervals through the long axis of the site. The tests were approximately 35 cm in diameter and excavated to bedrock. All removed matrix was screened through one-quarter inch mesh. Shovel test locations were noted on the site map and the holes were immediately backfilled.

To gain further information on the historic materials at 39BR49, a chain of title search was carried out at the Brule County Register of Deeds Office in Chamberlain. General Land Office plats were also consulted for any historic features that might be indicated within the project area.

Site Descriptions

<u>39BR48</u> (Figure 3): This site is a small scatter of lithic debris found on a narrow ridge extending northwest from the bluff tops. The ridge has very little soil development on it. Artifacts observed on the surface consist of two flakes of Bijou Hills quartzite, two flakes of chert, and two pieces of fire-cracked rock. Four shovel tests excavated through the long axis of the site did not produce any subsurface cultural materials.

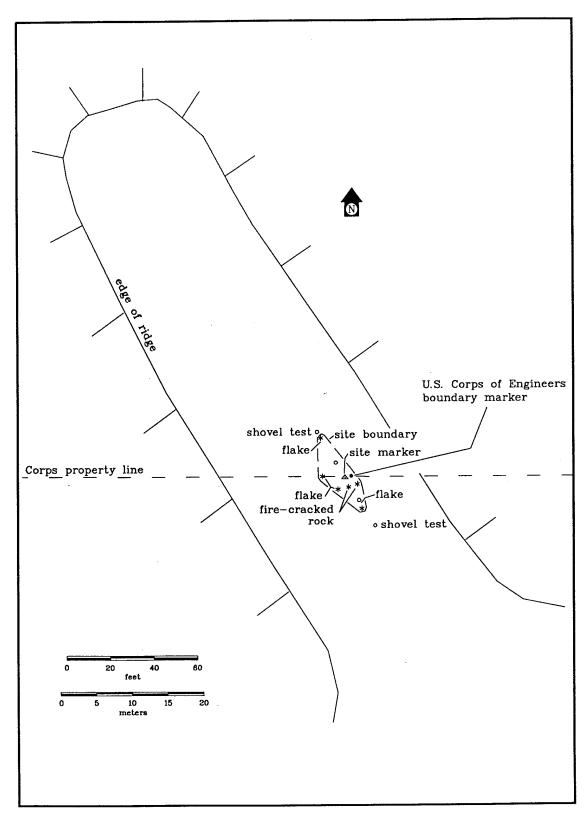


Figure 3. Site map of 39BR48.

39BR49 (Figure 4): This site consists of a concrete basement and a small scatter of associated historic artifacts. The basement is on intact river terrace; the artifacts are on the beach of the reservoir. The basement (Figure 5) is 30-by-28 feet and approximately 8 feet deep. The artifacts on the beach consist of a thin scatter of clear bottle glass (no finishes or bottoms), wire nails, sheet metal, and hand painted china (no maker's marks).

Brule County Register of Deeds records indicate that this site is within Lots 4 & 5 of Section 4. Along with the SW 1/4 of the SW 1/4 of Section 3, this land was filed on as a homestead by Lafayette Somers on January 15, 1880 (homestead entry 215-9). Somers received a patent on the land (certificate # 6289) on November 14, 1883. He sold the land to Elizabeth Ann Somers on March 14, 1885. Elizabeth, in turn, sold the land to Peolia L. Somers and Fred D. Somers on February 24, 1908. On July 29, 1915, DeEtte Somers, wife of Peolia, sold her interest in the property to Fred D. Somers. On February 21, 1945, Fred D. Somers sold the land to C.B. Creamer. Creamer sold the land to the U.S. Government on April 1, 1952.

The Creamer to U.S. Government deed records provide a list of what the Creamer's could remove from the property after the sale:

Dwelling: 28-by-36 feet, with an 8-by-10 foot annex and a 6-by-28 porch

Garage: 12-by-20 feet Toilet: 4-by-5 feet

Ice House: 16-by-18 feet

Old Fairbanks Morse batryless lite plant demountable

All "A" hog houses Turkey brooder houses:

Two quonset 10-by-12 feet One regular 12-by-16 feet

The remaining feature recorded is almost certainly the basement of the dwelling described above. It is constructed of concrete and is approximately eight feet deep. Anchor bolts are still present in the top of the concrete and it appears that the house was, in fact, removed.

Rather than eroding from the present cutbank, it appears the artifacts on the beach are being washed back onto the beach from farther out in the lake. Although there is a excellent exposure of sediment along the cutbank, there is no indication of any other features or intact subsurface deposits on the site. Neither the basement nor the artifacts observed appear to be from the early use of the site; the material more likely dates from the 1920s through 1950s.

NRHP Eligibility

<u>39BR48</u>: This site is a very small surface manifestation of flaking debris and fire-cracked rock. It contains no subsurface materials, no features, and no time or functionally diagnostic tools. The research potential of 39BR48 appears to be very limited and the site is not believed to be eligible for nomination to the National Register of Historic Places.

<u>39BR49</u>: There is no evidence of an intact cultural level and this site and all above-ground structural elements of the farmstead have been removed or destroyed. Artifactual material on the beach appears to date from the 1920s through the 1950s; it is not related to the period of homesteading. This farmstead is not believed to be eligible for nomination to the National Register of Historic Places.

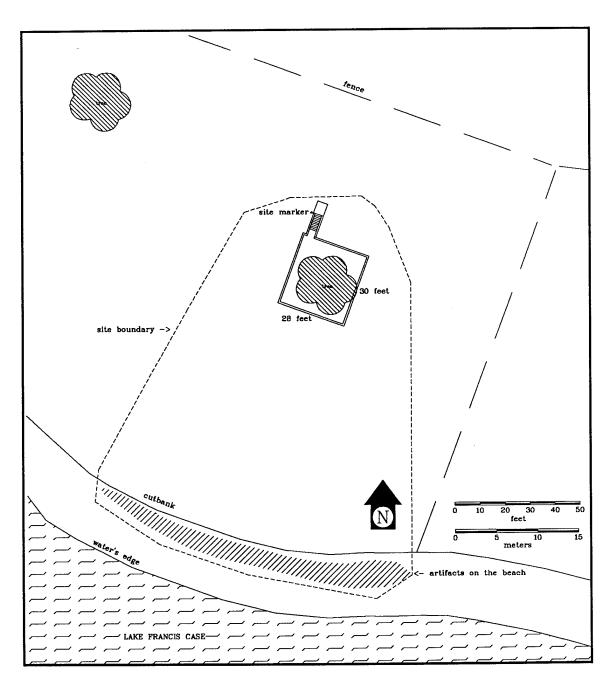


Figure 4. Site map of 39BR49.

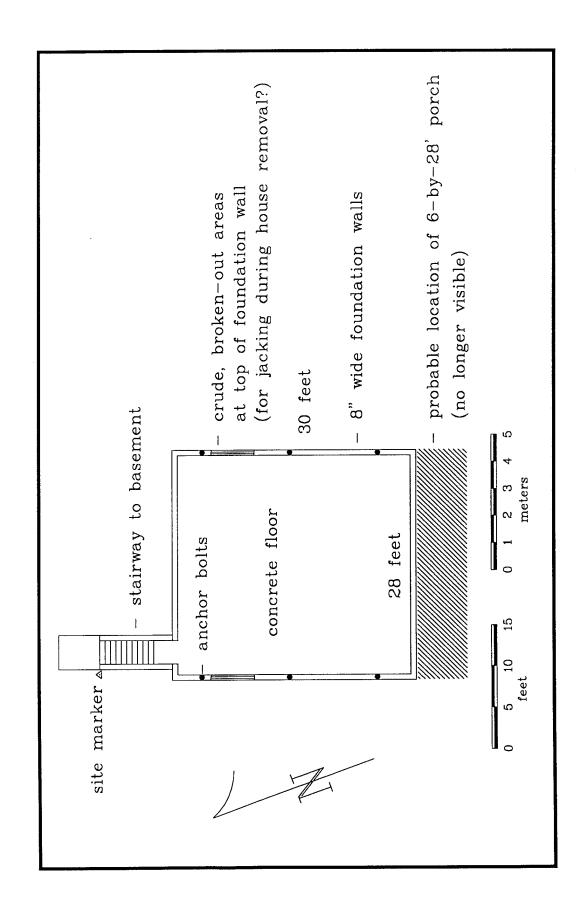


Figure 5. Detail of the basement at 39BR49.

Other Recommendations

Although the legal location (SE 1/4 of Section 24, T. 103 N., R. 72 W.) listed by Olson (1979:18) for the Nobles Federal Wagon Road indicates that remnants of this feature could be in the extreme northern end of the present study area, this seems highly unlikely due to the steep terrain in this area. If present at all, indications of the road would probably be to the north of the inlet in Section 24, where valley edges become considerably more gentle. This road bed should be searched for if additional cultural resource investigations are carried out to the north of the present survey area. It may be evident on aerial photos. If such a study is undertaken, the "very early maps" mentioned by Olson should be consulted to determine their potential degree of accuracy and, if possible, the primary sources of information for the route shown.

The 1995 LTA investigations of the Brule City locality produced far less evidence for the townsite than what was observed by Nowak (the marker post noted by Nowak [1980] was relocated). This is due to a dense concentration of drift wood and other flotsam in the low area where Nowak saw the house depressions and foundations. This debris is estimated to be over 30 cm thick and completely obscures the original ground surface. Being a ferry crossing and the earliest community in the county, Brule City has historical significance. Archeological testing is recommended in the area of the house features noted by Nowak to determine the integrity and character of the deposits. This should be accompanied by much more detailed archival research on the townsite.

REFERENCES CITED

Anderson, D.C.

1975 Western Iowa Prehistory. Iowa State University, Ames.

Cooper, Paul L.

- 1947 Preliminary Appraisal of the Archeological and Paleontological Resources of the Fort Randall Reservoir, South Dakota. Missouri Valley Project, River Basin Surveys, Smithsonian Institution. Submitted to the Missouri River Basin Recreation Survey, Region 2, National Park Service.
- 1949 Recent Investigations in Fort Randall and Oahe Reservoirs, South Dakota. American Antiquity 14(4): 300-310.

Corps of Engineers

Scope of Work Cultural Resource Survey Boyer Bend Area, Lake Francis Case, South Dakota. Ms. on file at the Corps of Engineers, Omaha District.

Cumming, Robert B., Jr.

1953 Appraisal of the Archeological and Paleontological Resources of the Fort Randall Reservoir, South Dakota: Supplement. Submitted to the Interagency Archeological And Paleontological Program, Missouri Basin Project, Smithsonian Institution.

Edwards, Guy D., and Merrill J. Mattes

1948 Project Report on Historic Sites in the Fort Randall Reservoir Area, Missouri River, Gregory, Charles Mix, Lyman, Brule, Buffalo and Hughes County, South Dakota. Department of the Interior, National Park Service, Region Two. Submitted to the Corps of Engineers, Omaha District.

Feltman, Laroy

1977 Cultural Resource Reconnaissance of a Proposed Irrigation Project in Brule County, South Dakota. US Army Corps of Engineers, Omaha District.

Fenneman, Nevin

1931 Physiography of Western United States. New York.

Lass, Barbara

1981 South Dakota Prehistory: An Overview. In *The Future of South Dakota's Past* edited by Larry J. Zimmerman and Lucille C. Stewart, pp. 1-15. Special Publication of the South Dakota Archaeological Society, Vermillion.

Mattes, Merrill J.

1949 Report on Historic Sites in the Fort Randall Reservoir Area, Missouri River, South Dakota. South Dakota Historical Collections 24:470-577.

Nowak, Timothy R.

1980 A Cultural Resources Investigation for a Proposed Gravel Survey Easement on Federal Lands of Lake Francis Case, Brule County, South Dakota. US Army Corps of Engineers, Omaha District.

Olson, Gary D.

1979 Historical Research. In A Cultural Resources Reconnaissance of the Federal Lands on the East Bank of Lake Francis Case, South Dakota. Augustana Research Institute, Augustana College, Sioux Falls, South Dakota and The Archeology Laboratory, University of South Dakota, Vermillion, South Dakota. Submitted to the US Army Corps of Engineers, Omaha District.

Olson, Gary D., and Larry J. Zimmerman

- 1979 A Cultural Resources Reconnaissance of the Federal Lands on the East Bank of Lake Francis Case, South Dakota. Augustana Research Institute, Augustana College, Sioux Falls, South Dakota and The Archeology Laboratory, University of South Dakota, Vermillion, South Dakota. Submitted to the US Army Corps of Engineers, Omaha District.
- Tibesar, William L., Paul H. Sanders, Michael L. McFaul, and Keith H. Dueholm
 1986 Evaluative Testing of Selected Sites Along the Left Bank of Lake Francis Case,
 South Dakota. Larson-Tibesar Associates, Laramie, Wyoming. Submitted to
 the US Army Corps of Engineers, Omaha District.

Winham, R. Peter, and L. Adrien Hannus

1991 South Dakota State Plan for Archaeological Resources, Introduction and Overview to Historic Contexts and Archaeological Management Regions for Research and Planning: A Working Draft. Archeology Laboratory, Augustana College, Sioux Falls, South Dakota. Submitted to the South Dakota Archaeological Research Center, Rapid City, South Dakota.